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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/736,155

12/15/2003

Ronald D. Hatfield

0015.02

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10/20/2008

USDA-ARS-OFFICE OF TECHNOLOGY TRANSFER
NATIONAL CTR FOR AGRICULTURAL UTILIZATION RESEARCH
1815 N. UNIVERSITY STREET
PEORIA, IL 61604

EXAMINER

PRYOR, ALTON NATHANIEL

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

10/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/736,155

Applicant(s)

HATFIELD ET AL.

Examiner

ALTON N. PRYOR

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7, 8, 10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicant's arguments, see paper, filed 7/17/08, with respect to the rejection of claims 6 and 12 under 102(b) and 112 1st paragraph have been fully considered and are persuasive. The rejections of claims 6 and 12 under 35 USC 112 and 102 have been withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5,7,8,10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myers et al. (USAN 20030044448; 3/6/03) and Asrar et al. (USAN 20040259732; 12/23/04). Myers et al. teach a method of preserving a grain product comprising applying to a grain product a composition comprising antioxidants such as rosemary extract. Myers et al. teach a method of treating wet grains that have been stored in a silage bag with the antioxidant composition (paragraph 43). The rosemary extract comprises antioxidants such as rosmarinic acid (o-diphenol compound). See abstract. Myers et al. do not teach the method comprising polyphenol oxidase. However, Asrar et al. teach a method of treating plant materials with a composition comprising antioxidants (abstract, paragraphs 48-49). Asrar et al. teach the method comprising polyphenol oxidase (PPO), an antioxidant (paragraphs 58,66). It would have been obvious to one having ordinary skill in the art to modify the invention of Myers et

al. to include the PPO taught by Asrar et al. One would have been motivated to do this since Myers et al. teach the use of antioxidants such as rosmarinic acid (rosemary extract) to preserve grain. Since Myers et al. use antioxidants for the preservation process, it would have been obvious to include additional antioxidants such as the PPO taught by Asrar et al to arrive at an invention comprising rosmarinic acid (o-diphenol) and PPO.

Claims 1-5,7,8,10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myers et al. (USAN 20030044448; 3/6/03) and Tono et al. (JP 02234638; 9/17/97). Myers et al. teach a method of preserving a grain (vegetation) product comprising applying to a grain product a composition comprising antioxidants such as rosemary extract. Myers et al. teach a method of treating wet grains that have been stored in a silage bag with the antioxidant composition (paragraph 43). The rosemary extract comprises antioxidants such as rosmarinic acid (o-diphenol compound). See abstract. Myers et al. do not teach the method comprising polyphenol oxidase. However, Tono et al. teach a method of preserving vegetables and fruit with a composition comprising polyphenol oxidase (PPO). See abstract. It would have been obvious to one having ordinary skill in the art to modify the invention of Myers et al. to include the PPO taught by Asrar et al. One would have been motivated to do this since Myers et al. teach the use of rosmarinic acid (rosemary extract) to preserve grain. Since Myers et al. use antioxidants for the preservation process, it would have been obvious to include the PPO taught by Asrar et al to arrive at an invention comprising rosmarinic acid (o-diphenol) and PPO for the purpose of preserving vegetation.

Telephonic Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALTON N. PRYOR whose telephone number is (571)272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alton N. Pryor/
Primary Examiner, Art Unit 1616